

# Maluridae: lump *Amytornis oweni* with *A. whitei*

Proposal prepared by Andrew Black 24 April 2026 with input from Guy Dutton, Thane Pratt, Leo Joseph, Anna Kearns.

## To recognise three species, not four, in the *Amytornis striatus* complex of grasswrens

### Background to the proposal

While AviList 2025 and Birds of the World online both include four species in this group, recent revision in the latter drew attention to the lack of evidence favouring recognition of *Amytornis oweni* as separate from *A. whitei*. The anomaly was noted by Pam Rasmussen and the item was brought before AusRAG. Here, a correction is recommended, pending further genetic analysis

<https://birdsoftheworld.org/bow/species/strgra4/cur/introduction>

<https://birdsoftheworld.org/bow/species/sangra1/cur/introduction>

Recent use of the name Pilbara Grasswren for *Amytornis whitei* (Mathews, 1910) (Christidis et al. 2013) overlooked the priority of the name Rufous Grasswren and is preferably avoided because of the unsettled taxonomy of the *A. striatus*-*A. whitei* group of grasswrens (Black et al. 2020a, b).

Rufous Grasswren was the name its author used for this species. In *The Birds of Australia Vol 10 1922-23*, Mathews gave the English name Rufous Grasswren to *Diaphorillas whitei*, which included *oweni* as a subspecies. The name continued to be applied by others for *whitei* and *oweni* either when combined or independently (RAOU 1926, Condon 1968, Higgins et al. 2001, Johnstone and Storr 2004, Chapman 2019, Black et al. 2020, Garnett and Baker 2021, Jones et al. 2021).

The name Pilbara Grasswren is apt for the Pilbara population but not for the Cape Range Peninsula subspecies *parvus*. Furthermore, genetic studies to date provide no support for the recognition of *oweni* as species (contra WGAC 988). If future analysis fails to provide suitable evidence, *oweni* must be ranked as a subspecies of *whitei* and the name Pilbara Grasswren is inappropriate for the extensive desert and more limited Eyre Peninsula populations. Only the name Rufous Grasswren is suitable for *Amytornis whitei* under alternative taxonomic hypotheses.

### REFERENCES

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WGAC 988 (as reported) The *Amytornis striatus* s.l. complex is treated as four species based on a combination of genetic, plumage, and ecological differences following Christidis et al. (2010, 2013); *A. whitei*, *A. oweni*, *A. striatus*, and *A. rowleyi*.

### **A brief taxonomic history**

The Striated Grasswren *Amytornis striatus* (Gould, 1840) has had a complex taxonomic history. After Gould described the species from material taken in eastern Australia, observations from the southern states and from central Australia and northern Western Australia suggested that the species occurred across much of the Australian continent. It later became known as the most widely distributed of 11 species in the genus (Christidis *et al.* 2010; Black *et al.* 2010; Black and Gower 2017; Gill and Donsker 2019; Birdlife Australia 2019; Birdlife International 2019).

Mathews (1922-23) and the RAOU Checklist Committee (1926) listed two species, the dorsally greyer, heavily streaked Striated Grasswren *A. striatus* of the south-eastern Australian Mallee and the dorsally more richly coloured but more lightly streaked Rufous Grasswren *A. whitei* (Mathews, 1910) of the Pilbara Region (Western Australia) and western and central deserts. Mathews included two subspecies in the Striated Grasswren, *A. striatus striatus* from New South Wales and *A. s. howei* from the Victorian mallee, and two subspecies in the Rufous Grasswren, *A. whitei whitei* of the Pilbara and *A. w. oweni* of inland sandy deserts.

Subsequent authors included all in a single species but with varied interpretations.

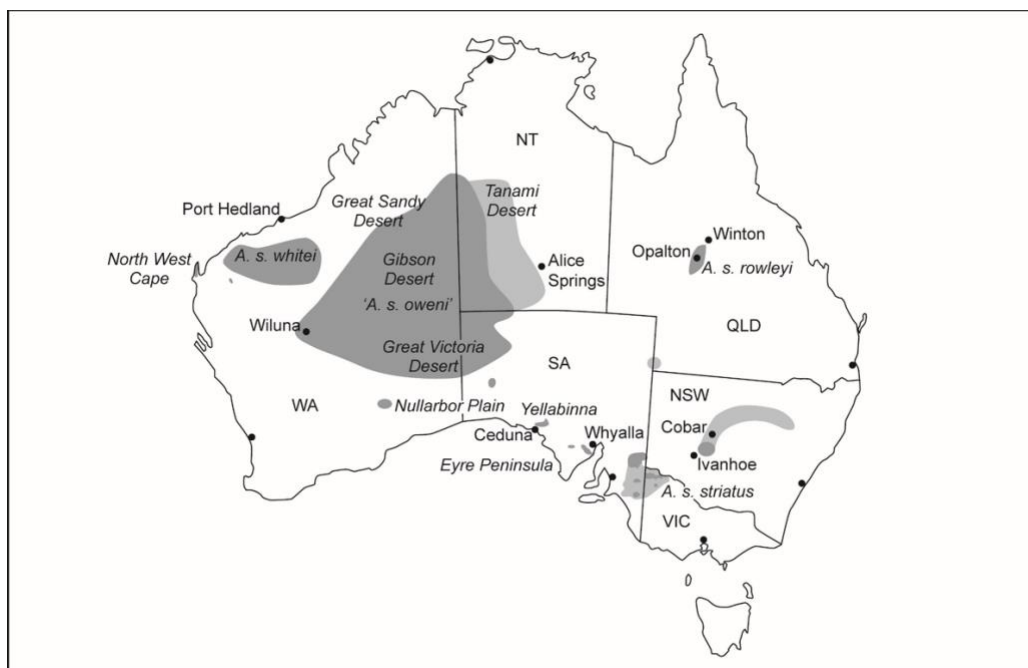
Ford and Parker (1974) recognized only two subspecies, inland *whitei*, including a recently discovered central Queensland population, with *oweni* a synonym, and southern *striatus* with *howei* a synonym.

Schodde (1982) proposed that the change in phenotype from the southeast to inland deserts was clinal, populations on Eyre Peninsula (South Australia) being transitional. Accordingly, he included the sandy desert populations within a variable nominate subspecies *A. s. striatus* and restricted *A. s. whitei* to the large-billed Pilbara form of stony substrates. Schodde and Mason (1999) maintained that arrangement and named the central Queensland population as a third subspecies, *A. striatus rowleyi*.

In a multilocus study of species-level systematics of genus *Amytornis* Christidis *et al.* (2010, 2013) sampled individuals from three populations within *A. striatus*, south-eastern *A. s. striatus*, central Queensland *A. s. rowleyi* and a specimen from the western deserts. Genetic distances among the three samples of between 3.8% and 4.5% led them to propose the elevation of each to species, including the western desert population that Mathews had named *A. w. oweni*. They also proposed elevation of the distinctive Pilbara population to species but had no sequence data for it.

Black *et al.* (2020a) tested this four-species hypothesis in a broadly sampled morphometric and phylogenetic study (ND2) of the *Amytornis striatus* complex and found that it comprised three, not four phylogroups representing *A. striatus*, *A. rowleyi* and *A. whitei* plus *A. oweni*. Net divergence between *oweni* and *whitei* was only 0.1% (L. Joseph unpublished). The hypothesis was thus rejected, and the desert population was recognised at subspecies level as *A. whitei oweni*. While there are both phenotypic and ecological differences between the Pilbara and desert populations (Black *et al.* 2020a), no analysis of their interaction or level of mutual diagnosability has been undertaken that might challenge their evidently tight genetic relationship, consistent with recognition of well differentiated subspecies.

Black *et al.* (2020a) restored subspecies *howei* from synonymy within *A. striatus* and two new subspecies were described, *A. w. parvus* and *A. w. aenigma* (Black *et al.* 2020b). All recommendations in the revision of Black *et al.* (2020a, b) are followed in AviList 2025. This proposal simply reduces the taxonomic status of *oweni* to subspecies and returns the English name of *A. whitei* to Rufous Grasswren as first described.



**Fig. 1. Distribution of the *Amytornis striatus* complex, named as subspecies of a single species (Schodde and Mason 1999)**



**Fig. 2. Plumages vary little among all taxa in the group and are not broadly diagnostic.** From left to right, named as recommended; *A. whitei whitei*, *A. w. oweni*, *A. w. aenigma* (x3), *A. striatus howei*, *A. s. striatus*, *A. rowleyi*. Variation appears as great within *A. whitei* as across the three species.

#### **AusRAG committee assessment:**

Five members of Aus RAG voted on and endorsed the recommendation to support a three species hypothesis (*whitei*, *striatus*, *rowleyi*) until further data come to hand. Leo Joseph in particular highlighted the following relevant points:

1. As I have been saying informally since we published the Black et al. 2020 Emu paper and as we have been trying and trying to get the lab work done to test, it is that yes, it may seem odd that one species of grasswren should have populations in rocky ranges and sand-dune habitats.
2. Therefore, given that there was next to no mtDNA diversity among these rocky and sand dune populations that we therefore united under *A. whitei* (along with discussions of plumage and morphometrics), the test one has to do is to acquire nuclear DNA data and see whether an mtDNA capture has taken place between what might in fact be a rock-inhabiting species and a sand-dune inhabiting species.
3. The proposal to recognize four species i.e., which recognized *oweni* and *whitei* as separate species in Christidis et al. (2013) was done with no molecular data from *whitei sensu stricto*

of rocky habitats when tissue samples of it did exist, and with just 351 base pairs only of ND3 derived from toepads of one specimen sequenced in Christidis et al. 2010 in MPE and therefore representing the vast range of the sand-dune inhabiting populations.

4. The critique of Christidis et al.'s (2013) decision to recognize *oweni* at species rank has always been that they made it without genetic data from *whitei*, which is geographically adjacent to it, and with  $n = 1$  and 351 bp of ND3 to represent all of what was assumed to be the range of *oweni*. How, for example, could they eliminate the possibility that they had sampled introgression from *whitei*? If cryptic species are to be found in Australian ornithology it may well be in *Amytornis* so assigning *oweni* species rank and this enormous range on pretty slim genetic data bent my mind then and does so still. Phenotypic data were mentioned but Black et al. 2020 expanded on that substantially.
5. The burden of proof for now is on a four species arrangement (*whitei*, *oweni*, *striatus*, *rowleyi*), not the three species arrangement of Black et al. (2020) (*whitei*, *striatus*, *rowleyi*). And we are trying to get the relevant acquisition of nuclear DNA data done to follow if through.

#### **Recommended revision to Avilist 2025:**

**Table 1. Avilist 2025 and proposed taxonomy. CA = central Australia, NSW = New South Wales, SA = South Australia, WA = Western Australia**

Avilist 2025		Recommendation (Black et al. 2020)		Distribution
Scientific name	English name	Scientific name	English name	
<i>Amytornis whitei</i>	Pilbara Grasswren	<i>Amytornis whitei</i>	Rufous Grasswren	
<i>A. w. parvus</i>		<i>A. w. parvus</i>	(Cape Range Grasswren)	North-West Cape Peninsula WA
<i>A. w. whitei</i>		<i>A. w. whitei</i>	(Pilbara Grasswren)	Pilbara WA
<i>Amytornis oweni</i>	Sandhill Grasswren			
<i>A. o. oweni</i>		<i>A. w. oweni</i>	(Sandhill Grasswren)	central and western Deserts WA, CA, SA
<i>A. o. aenigma</i>		<i>A. w. aenigma</i>	(Yellabinna Grasswren)	Yellabinna and Eyre Peninsula SA
<i>Amytornis rowleyi</i>	Opalton Grasswren	<i>Amytornis rowleyi</i>	Opalton Grasswren	central Queensland
<i>Amytornis striatus</i>	Striated Grasswren	<i>Amytornis striatus</i>	Striated Grasswren	
<i>A. s. striatus</i>		<i>A. s. striatus</i>	(Mukarrhippi)	central NSW
<i>A. s. howei</i>		<i>A. s. howei</i>	(Mallee Grasswren)	nw Victoria, se SA, sw NSW